

# Excalibur® 11018M MR™



## Basic, Low Hydrogen, Low Alloy Steel SMAW Electrode (AWS E11018M-H4R)

Excalibur® 11018M MR™ is designed primarily for joining high strength steel types in the as-welded or stress relieved conditions with excellent low temperature impact properties and robust welding procedures. All-position welding, except vertical down.

### Advantage Lincoln

#### Integrated Silicate Technology™

Increased moisture resistance and decreased coating fragility.

#### Easy Strike™ Tip

Consistent, smooth arc starts.

#### Square Burn-Off

Focused arc for hard to access welds.

#### X-Ray Quality

Demanding applications.

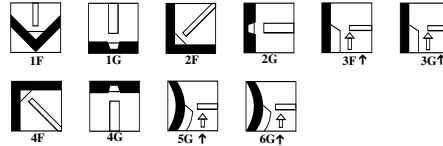
#### Hermetically Sealed Packaging – Easy Open Cans

Delivers quality product, performance reliability and consistent results.

#### ISO 9001 and 14001 Certified

Manufactured to standards for environmental and quality management systems.

### Welding Positions



### Conformance

AWS A5.5/A5.5M:2006	E11018M-H4R / E7618M-H4R
ASME SFA 5.5:1996	E11018M-H4R
CSA W48-01:	E7618-M-H4

### Typical Applications

- Certain Weldable Quenched & Tempered Steels, such as - T1, A514, A517 and A709
- General Fabrication Requiring E11018-G or E11018M Electrode Classification.

### DIAMETERS / LENGTH / PACKAGING

Diameter in. (mm)	Length in. (mm)	10 Lb. (4.5 kg) Easy Open Can	50 Lb. (22.7 kg) Easy Open Can
3/32 (2.4)	14 (350)	ED031972	ED031975
1/8 (3.2)	14 (350)	ED031973	ED031976
5/32 (4.0)	14 (350)	ED031974	ED031977
3/16 (4.8)	14 (350)		ED031978

### TYPICAL OPERATING PROCEDURES

Polarity	Current Range (Amps)			
	3/32 in. (2.4 mm)	1/8 in. (3.2 mm)	5/32 in. (4.0 mm)	3/16 in. (4.8 mm)
DC+	70-110	90-160	130-210	180-300

### MECHANICAL PROPERTIES – As Required per AWS A5.5/A5.5M:2006

	Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Elongation %	Charpy V-Notch ft*lb (Joules) @-60°F (-50°C)	Diffusible Hydrogen ml/100g
<b>Requirements</b> AWS E11018M-H4R	110 (760) min.	98 - 110 (680 - 760)	20	20 (27)	≤4
<b>Test Results</b> As-welded	111 - 117 (765 - 807)	100 - 110 (690 - 758)	20-25	40 - 65 (54 - 88)	1-4

### DEPOSIT COMPOSITION – As required per AWS A5.5/A5.5M:2006

	%C	%Mn	%Si	%P	%S	%Ni	%Cr	%Mo	%V
<b>Requirements</b> AWS E11018M-H4R	0.10 max	1.30 - 1.80	0.6 max	0.030 max	0.030 max	1.25 - 2.50	0.40 max	0.25 - 0.50	0.05 max
<b>Test Results</b>	0.04 - 0.05	1.55 - 1.80	0.40 - 0.55	0.010 - 0.030	0.005 - 0.020	1.90 - 2.50	0.02 - 0.15	0.35 - 0.50	0.005 - 0.015